

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning at page 7, line 14, as follows:

Referring to the drawings, illustrated in FIG. 1 is a generalized depiction of one embodiment of a mount and control system of the present invention indicated at 100 ~~10~~. Mount assembly **11, 50** are attached to an engine **20** by a fastener, a stud, or the like, not shown in the present figure. Similarly, mount assemblies **11, 50** are attached to a vehicle body or frame member **25** such that the mount rests between engine **20** and frame member **25**. The mount assemblies **11, 50** interact with the controllers **30, 40** to alter the flow characteristics of the MR fluid, thereby changing the vibration damping characteristics. The controllers **30, 40** can be any electrically controlled device, combined into one unit or separate, such as a microprocessor or a digital signal processor, providing the capability of altering the ability of the mount to change the damping characteristics. The controllers **30, 40** are connected to the engine mounts **11, 50** via any one or more electrical field generating devices, such as a coil or the like.

Please amend the paragraph beginning at page 8, line 10, as follows:

FIG. 2 illustrates an embodiment of a MR mount 200 ~~100~~ of the present invention. The mount assembly 200 ~~100~~ can include a disc shaped orifice plate **130** and a coil **110** wrapped in or adjacent a metal mounting ring, member or housing **120**. The mounting member **120** may be positioned between a base plate **180** and a hollow flexible

body **150**. The base plate **180** and body **150** can each include a respective mounting stud **160, 190**.

Please amend the paragraph beginning at page 8, line 15, as follows:

The mount also can comprise a first chamber **170** defined in part by the body **150**. Elastomeric materials, including natural or synthetic rubber, silicon elastomer, and thermoplastic elastomer, can be used to form the body **150**. An elastomeric diaphragm **185** can be bonded to a surface of the housing **180** to define a second chamber **175**. The coil **110** is positioned to generate an electrical field across gap **195** formed between the orifice plate **130** and coil **110** or member **120**. The orifice plate **130** can be positioned to divert the flow of fluid in the mount assembly **200** ~~**100**~~ adjacent the coil **110** to influence the shear resistance characteristics of the fluid.

Please amend the paragraph beginning at page 10, line 21, as follows:

Referring to the drawings, FIG. 3 illustrates an embodiment of a control loop structure **300** consisting of a generalized plant and a controller model ~~**200**~~. The control loop structure is known in the art as a 2-port representation of a plant. The loop structure is selected for compatibility with the requirements of a particular design. In general, since the performance specifications are frequency based, namely the band of frequencies around the resonance frequency for engine bounce, the objectives can be specified in the frequency domain directly, avoiding the need to convert to time domain specifications.

Please amend the paragraph beginning at page 12, line 16, as follows:

In **FIG. 4A/B**, a flow diagram of a control algorithm **400 ~~300~~** provides further detail of an embodiment of designing the left and right controllers **30, 40**. A first tunable parameter γ can be selected (Block **305**). The tunable parameter γ is the upper bound of the objective function obtained by taking the weighted sensitivity transfer of the closed loop system. The value of γ is typically fixed at 1, but when changed, it is usually increased, indicating that a decreased performance of the controller is acceptable.